TELEPHONE REPORT TO

THE REGULATORY FLEXIBILITY

COMMITTEE OF THE

INDIANA GENERAL ASSEMBLY

By the Indiana Utility Regulatory Commission

August 2001

HIGHLIGHTS

ILEC Share of the Statewide Access Line Market	92%
Access Lines Provided by Incumbent Local Exchange Carriers in 2000:	3,680,072
Access Lines Provided by Competitive Local Exchange Carriers in 2000:	320,500
Percentage of Total Residential Access lines Served by CLECs:	2.2%
Total Access Lines in Indiana at Year-end 2000	4,000,572
Access Line Growth in 2000 - Indiana Incumbent Local Exchange Carriers:	120,576
Access Line Growth in 2000 - Indiana Competitive Local Exchange Carriers:	270,472
Number of CLECs Doing Business in Indiana:	46
Percentage of Competitive Access Lines Provided by the 3 Largest CLEC:	~ 60%
Number of Incumbent and CLECs Offering DSL	20
ILEC Wire Centers in Indiana	566
Wire Centers Supporting DSL /Offering DSL Year End 2000	25

1. 0 EXECUTIVE SUMMARY

Local Exchange Competition

The IURC continues to fulfill its legislative mandate to prepare and report to the Regulatory Flexibility Committee of the Indiana General Assembly on the status and impact of competition on universal service and on pricing of all telephone services under the jurisdiction of the Commission.

The Telecommunications Act of 1996 (TA-96) affects nearly all areas of intrastate telecommunications services either directly through actions required of the States or indirectly through rulemakings required of the Federal Communications Commission. As mandated by the Act, the IURC has undertaken new administrative responsibilities that include advancing the goals of universal service and establishing policies and prices for interconnection, removing barriers to competitive market entry while protecting the interests of consumers, and ensuring quality services. As part of TA-96, the Commission is reviewing the petition of Ameritech-Indiana for a three-phase process to show compliance with the federal requirements for entry into in-region InterLATA long distance as part of the *quid pro quo* of market-opening CLEC competition.

In Indiana, as in many other states, the level of competition for local and advanced telecommunications services is not as great as was envisioned following the passage of TA-96. As the data in the report show, competitive choice is slowly growing for business customers in major metropolitan areas. Few residential users, especially in rural areas, have selected carriers other than the ILECs. A partial list of factors for the level of competition includes: unrealistic expectations of CLEC capabilities, bankruptcies and the near collapse of telecom sector financials, the soundness of CLEC business plans, demographic factors such as population density, availability of suitable network element pricing, and proven Operating Support Systems between Incumbent LEC and Competitive LEC.

Enforcement: The Commission has spent much of the past 5 years implementing the market-opening provisions of the Telecommunications Act of 1996 and the FCC's orders. Several Commission proceedings are underway to improve service quality, address outage liability, establish unbundled pricing, and insure interconnection agreements. The Commission must be able to enforce and insure compliance with its orders. The overwhelming ILEC access line market share and the significant investment required to even partially build out comparable local loop facilities requires the Commission to monitor any exercise of market power to impeding competitive entry.

Statutory and Regulatory Traction: Enforcement requires the ability to apply both incentives and penalties. In five years, local competition has only achieved 8% market share overall. Competitive share growth is concentrated in few dense metropolitan areas, and over 60% of that is held by only 3 of 46 CLECs. Others are small niche players. Two-thirds of all CLEC loops are provided over CLEC-owned facilities. These data suggest that for competition to thrive in the residential and small business segments, some different statutory or regulatory requirements may be necessary to provide incentives or preemptive policy responses to mitigate the incumbents' market power. [1]

[1] "Evolving Market Structures, Conduct, and Policy in Local Telecommunications," document 00-05, published by the National Regulatory Research Institute: "Nevertheless, to the extent that they continue to be the largely uncontested domain of incumbent local exchange carriers and demand in them is highly inelastic, residential and small business telephone markets remain ripe for the exercise of market power."

Local Exchange Competition, Continued

Residential Competition: In the residential consumer market, competitors have acquired only 2.2% market share.[2] Further, study by Postal Zip Code indicates a need to understand the implications of limited competitive selection by large segments of the state population. Both the legislature and the Commission need to assess whether substantive programs are necessary in the rural and low income residential segments to deliver the benefits of competition and advanced services such as broadband access to the Internet.

Universal Service: Prior consumer programs have concentrated on providing Life Line service and offset programs for small carriers to deliver service in high cost situations. State programs may be supplemental to Federal Universal Service Funds. The IURC is in the process of certifying that rural telephone companies receiving Federal Universal Service support are using the funds only for the provision, maintenance and upgrading of facilities and services for which the support is intended." The current intrastate Indiana High Cost Fund (IHCF) is administered by Ameritech Indiana and provides assistance to qualified small Local Exchange Carriers. The Federal Universal Service Fund (USF) helps small companies serving consumers in rural, insular, and high cost areas to insure that services are reasonably comparable to those services that are provided in urban areas and at reasonably comparable rates.

Maintenance of Service Quality in an Environment of Lessened Regulation: Customer concerns with Service Quality were heightened by Ameritech Indiana's problems meeting statutory standards in the year 2000. The IURC has vigorously worked to insure all carriers' compliance with service standards for installation, repair service, and maintenance of the core network infrastructure. The Commission continues to address issues of Service Quality and Consumer Rights, but the IURC must break through the delays and procedural hurdles to help citizens avoid the cost of service degradation and poor carrier performance.

Other Emerging Technology Alternatives: Wireless service is outside the scope of this report and the Commission's regulatory authority. However, wireless service competes for both interstate and intrastate voice share. In the future, carriers will agree to next generation standards and wireless data will gain broader acceptance. For now the Commission is unable to factually state the use of wireless service impact on local exchange service. Cingular, Verizon, Sprint PCS, NEXTEL, VoiceStream, and AT&T are among the largest wireless carriers in Indiana.

Cable TV companies are just beginning to make their high speed Internet service a viable consumer competitive option. Indiana data are not available at this time regarding use of voice over IP (VoIP) or voice over cable and its impact on basic local service. A slow- developing, less-than-competitive market for consumer communications also blocked the way. "As we now know, investors vastly overestimated both the success of Internet-based commerce and the pace at which Americans would buy high-speed service. Only 8 percent of (U.S.) households currently have cable modems or digital subscriber lines. The spread of these technologies has been slowed by the difficulties small companies have faced in obtaining access to local telephone networks, the reluctance of profitable cable companies to enter this low-margin market and the tedious process of installing high-speed connections in homes." [3] Further, as stated in the NY Times, "Experts do not expect high- speed connections to become as widespread as cable television, for example, for at least 20 years. The delay could cost $100 billion in corporate profits and $300 billion in benefits to consumers. The key to unlocking these benefits is removing obstacles at the local level. That means developing more convenient, consumer-oriented technologies but also, and more urgently, removing barriers to competition in local markets. These include stonewalling by local phone

[2] In contrast to Interstate Long Distance Markets, as recently as 1999, the FCC reported that AT&T, the once dominant carrier, had a market share of 43%; MCI WorldCom's share was about 26%, Sprint's was 10% and competitors had the remaining 21%.

[3] New York Times, July 29, 2001.

Local Exchange Competition - Continued

companies that are reluctant to cooperate with independent providers of digital subscriber lines, and, more generally, the lack of local competition in telephone and cable services."[4]

The emerging technologies and telecommunications sectors have been beset by bankruptcy. A partial list of companies serving Indiana is provided as Attachment 1. The Commission continues to monitor the deployment of advanced technologies and the companies, which plan to bring the benefit of those services to Indiana citizens.

Data Summary

We present here summary statistics on local telephone services competition in the state of Indiana as reported in the Commission's Local Competition Survey. The survey was sent to Incumbent Local Exchange Carriers (ILECs) and Competitive Local Exchange Carriers (CLECs) in February 2001. The summary statistics and charts provide a snapshot of local telephone service competition, as reported by the service providers in Indiana, as of December 31, 2000.

Competition at the local exchange level, measured in units of statewide local telephone lines in service to end-user customers, has increased in Indiana. The statewide results nearly mirror the national results reported to the Federal Communications Commission in its twice-yearly survey. Indiana's survey gathers data from all carriers active in Indiana while the FCC survey targets carriers with at least 10,000 local access lines in service in a state.

The primary ILECs in Indiana are Ameritech Indiana, Verizon Communications and Sprint. Smithville Telephone Company, Inc., Northwestern Indiana Telephone Company, Inc., and Rochester Telephone Company, Inc. are the next largest ILECs operating in Indiana. TDS, as a Holding Company for 9 companies in Indiana, has approximately 30,000 lines in service. If considered a single telephone company, TDS' size, excluding its wireless operations, would be 5th largest. Other ILECs include Holding Companies (example TDS), Telephone Cooperatives (examples Mulberry Co-op and Perry-Spencer Rural Telephone Co-op) and Small Telephone Companies (examples West Point Telephone Company, Inc. and Geetingsville Telephone Company). The Indiana Telecommunications Association classifies companies in their membership by size: Small: <5,000 access lines; Medium: 5,000 to 20,000 lines; Large > 20,000 access lines.

The CLECs are Time Warner Telecom, McLeod Telecommunications Services, Inc., TCG Indianapolis - AT&T Communications of Indiana, Inc., and several hundred others. Certificates of Territorial Authority are issued to companies that plan to provide telecommunications service in Indiana. There are two broad types of authority granted to providers: Local Exchange Bundled Resale Authority and Local Exchange Facilities-based Authority.

Noteworthy Data Include:

1. CLEC Phone Line Growth
   - CLECs reported a total of 320,500 lines in service at year-end 2000, compared to 50,028 in 1999. The increase in lines was 270,472.
   - CLEC market share grew from 1.4% share to 8% share of the total market over the period of January to December 2000.

2. ILEC Phone Line Growth
   - ILECs reported a total of 3,680,072 lines in service at year-end 2000, an increase of 120,576.
   - ILEC market share declined 6.6% share points over the one-year period.
   - ILECs provide 92% of the total telephone lines in service in Indiana.

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[4] *Id.*

Data Summary, Continued

3. Residential vs. Business Competition
   - Business Market Share: ILECs: 83.2%. CLECs: 16.8%. CLEC prior year share: 3.1%.
   - Residential Market Share: ILECs: 97.8%. CLECs: 2.2%. CLEC prior year share: 1.6%.
   - Business-Residential % Split of lines: ILECs: 34.0% Business; 66.0 % Residential
     CLECs: 82.5% Business; 17.5 % Residential.

4. Mode of Competitive Entry: Competitive Local Exchange Carriers have several options to connect to customers: a.) Construct and use own facilities; b.) Resale of ILEC services; and c.) Use unbundled network elements (UNEs) leased from other carriers.
   - CLEC-owned facilities provided about 60% of the local loops to end-user customer lines.
   - ILEC-resale accounted for 84,000 CLEC lines at year-end 2000; in 1999 – 50,000.
   - ILECs reported providing about 44,250 lines as UNEs in 2000, compared to 17,000 UNE lines in 1999.

5. Geographic Considerations
   - COUNTIES: A map of the State of Indiana, Chart 8, illustrates the distribution of CLECs offering service by county. Keep in mind that the CLEC services vary and may not be offered countywide, 30 counties have 3 or fewer CLECs offering any services. In 27 counties, 4 - 6 CLECs offer services. 13 or more CLECs offer service in 14 counties.
   - ZIP CODES: According to the FCC Survey 34% of the ZIP Codes in Indiana have no ILEC alternative. Approximately 45% of the Zip Codes have competitive choice to obtain service from the incumbent or up to 3 CLECs. The remaining 21% have a choice of 4 or more alternatives.

6. DSL Service:
   - Of the 20 companies offering broadband services, 8 are ILECs and 12 are CLECs. However, deployment of most of these advanced services is limited to major metropolitan areas. Only 25 of the 566 Wire Centers are equipped to offer DSL service.

FCC – IURC Survey Differences: The FCC Report of Local Telephone Competition (Indiana), December 2000, lists 3,570,000 End-User Lines served by the ILECs. CLECs reported 210,000 End-User Lines served. When comparing to the IURC Competitive Survey, the numbers were 3,680,000 and 320,500, respectively. The difference can be attributed to counting slightly different categories: the FCC counted medium and large businesses as one group, and combined small business and residential lines. The FCC Survey reports are only required of carriers with over 10,000 lines while the IURC survey attempts to collect data from all ILECs and CLECs. Consequently the FCC calculated the CLEC share at 6% for Indiana and 8 % nationwide. IURC numbers conclude an 8% CLEC share in Indiana.

Both surveys agree that 7 ILECs in Indiana provide service to over 10,000 lines each. The FCC survey collects data from 12 CLECs with over 10,000 lines, and the IURC compiled responses from nearly 200 CLECs holding Certificates of Territorial Authority (CTAs), 46 of which actually provide service in the state.

During 2000, a notable number of CLECs encountered financial difficulties that limited competitive entry into the Indiana market. By year-end 2000 nearly 200 CTAs had been authorized for CLECs. Of that 200, 89 had filed tariffs indicating an intent to offer services, however, only 46 CLECs responded to the survey as currently offering service in Indiana.

Conclusions

Competitive telecommunications service grew in Indiana during the year 2000 largely attributable to two or three Competitive Local Exchange Carriers (CLECs) providing service to select business customers in the largest metropolitan areas. In the five years since enactment of the Telecommunications Act of 1996, competitive services account for only 8% of the total telephone lines, and residential consumers fared poorly with only 2% having any form of competitive local service. Incumbent market dominance remains an indisputable fact in Indiana.

Service quality issues dominated the telecommunications news in late 2000 and early 2001. Some groups have expressed fear that lessened regulation and the long-term impact of mergers of industry will result in service quality degradation due to profit maximization. The Commission's role continues to be to conduct investigations, find facts and to issue orders. The Commission works to balance the interests of all parties. Since the passage of the Telecommunications Act of 1996, the Commission has taken on broader policy implementation mandates. It is our belief that the existence of a truly competitive telecommunications market is the most effective way to bring benefits to all Hoosiers. Our work during the past several years has been, and our work for the next several years will continue to be focused toward bringing that truly competitive market to Indiana. While the FCC established nationwide guidelines, the IURC addresses network interconnection issues between carriers, resolves disputes, and approves cost-based pricing for unbundled network elements. The IURC will provide the FCC with comments prior to approving SBC-Ameritech's entry into the in-region interLATA long distance market.

Other investigations are underway into limitations of liability for service outages and the structure of wholesale and retail operations. The Commission will examine what may be necessary in the way of regulatory change to further open competition in Indiana by removing barriers to market entry. The legislature is asked to fully consider legislation and statutory actions necessary to increase the enforcement powers of the IURC and to bring the benefits of the competitive marketplace to local service markets.

2.0 The Telecommunications Market Today

Telecommunications is a vital part of the U.S. economy and most everyone is touched daily by it. Besides personal contact and business use, telecommunications, through E911, is an important safety mechanism and telephone numbers are important points of contact. Broadly, telecommunications includes all forms of communications. It includes the traditional mode of telecommunications such as voice residential service, business line service, pay-telephones and newer modes of telecommunications such as wireless phones, pagers, personal digital assistants (PDAs), e-mail, Internet telephony, and interactive TV. The transmission of telecommunication signals may be sent via electrical signal (wire) or Photonics (fiber); it may be broadcast using a segment of the radio spectrum; or transmitted via satellite. Telecommunications incorporates billions of dollars of infrastructure. As the United States moves increasingly to an economy based on applications enabled by communications technology the telecommunications infrastructure has become the highway of the 21st century.

While telecommunications is a broad field, the Indiana Utility Regulatory Commission is directly involved in a small segment of telecommunications, primarily basic local exchange service. Our role is defined in the Indiana Code, in the Indiana Administrative code, in the Telecommunications Act of 1996 and interpreted in case law. The IURC is called upon to shape and implement the policies of the Federal Communications Commission, the Indiana General Assembly, and Congress.

Some segments of the market are openly competitive such as wireless service, payphones, pagers and e-mail service. The telecommunications market is in the midst of a transition from traditional monopoly to an open and competitive market. To encourage that transition, the Telecommunications Act of 1996 (TA-96) established mandates that have resulted in several significant cases before the IURC and others have simply grown out of the changes to the telecommunications industry itself. A listing of the most significant cases follows:

Cause No. 41657: The Telecommunications Act placed many requirements on Regional Bell Operating Companies (RBOCs) to open local markets before allowing them into the in-region long distance market. The requirements under Section 271 of TA-96, together with Ameritech Indiana's desire to enter the in-region long distance market, resulted in Ameritech Indiana filing Cause No. 41657.

Cause No. 40785: The Act required large ILECs to provide their bundled services at wholesale rates and as unbundled network elements (UNEs) at economic cost to CLECs. TA-96 required states to look at Universal Service and Access Reform, which led to cases being filed by each of the three major ILECs in Indiana for the purposes of Rate Rebalancing and Access Reform. These cases, 40785-S1 (Ameritech Indiana), 40785-S2 (Verizon), and 40785-S3 (Sprint), were all resolved by Settlement of the parties and resulted in rate reductions, service quality commitments and access charge reform. These benefits to ratepayers are only ensured until the expiration of the individual Settlement Agreements.

Cause No. 41911: Service quality issues were also highly visible in 2000. In January of 2001 the Commission initiated an investigation into Ameritech's service quality. Specifically, Ameritech Indiana was ordered to show cause why the Commission should not pursue any and all available remedies that are provided by law for failure to provide reasonably adequate service. The scope of the investigation is limited by the order to calendar year 2000 results in four specific minimum service standard areas. The proceedings are ongoing.

Cause No. 41535: Area Code and numbering issues have become very important as more and more carriers are entering the market and therefore requiring NXX codes. The growth of cell phones, pagers, FAX lines, and access to the Internet is consuming telephone numbers at a rapid pace. The Commission recently issued an order approving a three-way area code split in Northern Indiana, and it is examining ways to insure that numbers are used in the most efficient manner possible to delay the need for other new Area Codes. Specifically, the Commission has adopted number conservation measures, including methods for reclaiming blocks of numbers that are not being used by telecommunications carriers to provide service to customers. Also, the Commission has ordered number pooling, which will allow carriers to share blocks of numbers and will result in more efficient use of these resources.

3.0 Market Performance Data and Analysis

The changes in regulation brought about by TA-96 are slowly having their effect. The IURC and the FCC periodically measure the changes in the local telephone market using several basic quantitative measurements. The primary tool is the IURC's Annual Local Competition Survey that is sent each February. Recipients are all certificated Local Exchange Carriers (ILEC and CLEC) in the state. From the responses, data are compiled and analyzed as a key element of this report.

One standard that has been used in the past to measure the level of competition is the number of competitive carriers authorized to provide service in the state. The IURC issues Certificates of Territorial Authority (CTA) to telecommunication companies to do business in Indiana. Many carriers have obtained CTAs and have yet to provide service, so that measure alone is misleading. Most certificated carriers are required to file tariffs before commencing service. A tariff is the document that describes services, terms, conditions and prices offered to potential customers. There are currently 89 CLEC tariffs on file at the IURC, 36 more than at this time in the year 2000. In Indiana, 46 competitive local exchange carriers (CLECs) are offering service to customers. Some CLECs offer service in the territory of more than one ILEC.

The next measurement of local competition is the level of penetration those carriers have attained. The first indicator of level of penetration is the number of access lines provided and the growth in the number of access lines. The following tables indicate that ILECs provide service to 92% of the access lines in the state. (See Chart 1)

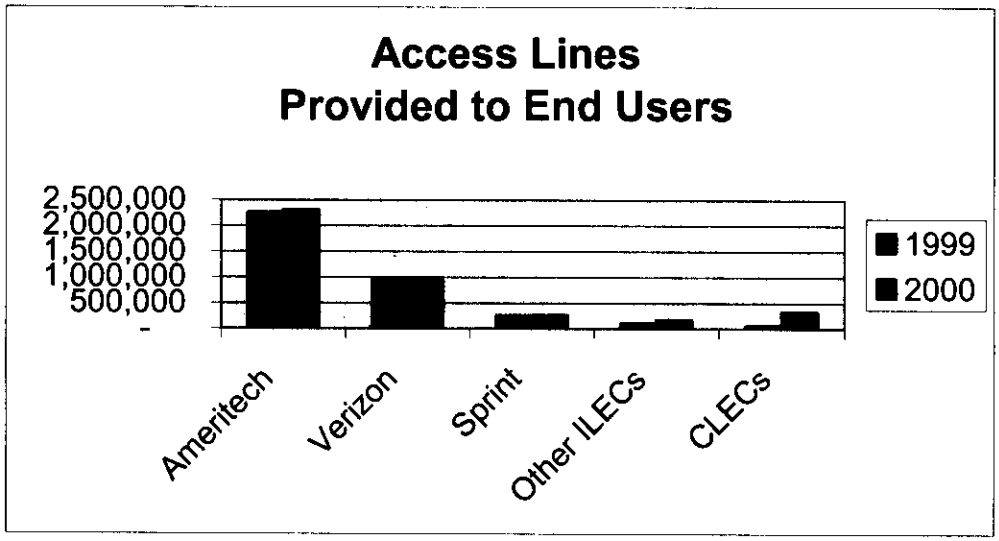

Chart 1

To profile the relative position of Local Exchange Carriers providing voice grade access lines to Indiana users, Chart 2 gives the breakdown of lines provided by Carrier or classification. Large ILECs, Ameritech, Verizon, and Sprint total 88% of the access lines; smaller ILECs provide just 4% of all lines, and the aggregate of CLECs provides 8% of the telephone lines.

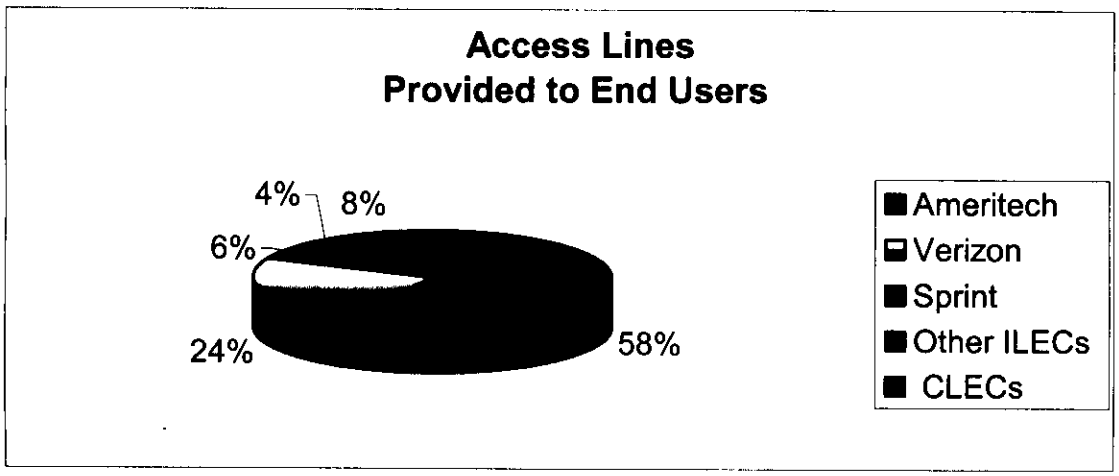

Chart 2

Although the CLECs only provide service to 8% of all access lines, they have experienced a remarkable percentage growth for year-end 2000 compared to the same time a year ago. CLEC access lines provided to end-users increased from 50,028 in 1999 to 320,500 in 2000. Of the overall growth in the local exchange market, CLECs made up 69% of the total growth in number of lines added during 2000. (See Chart 3 immediately below)

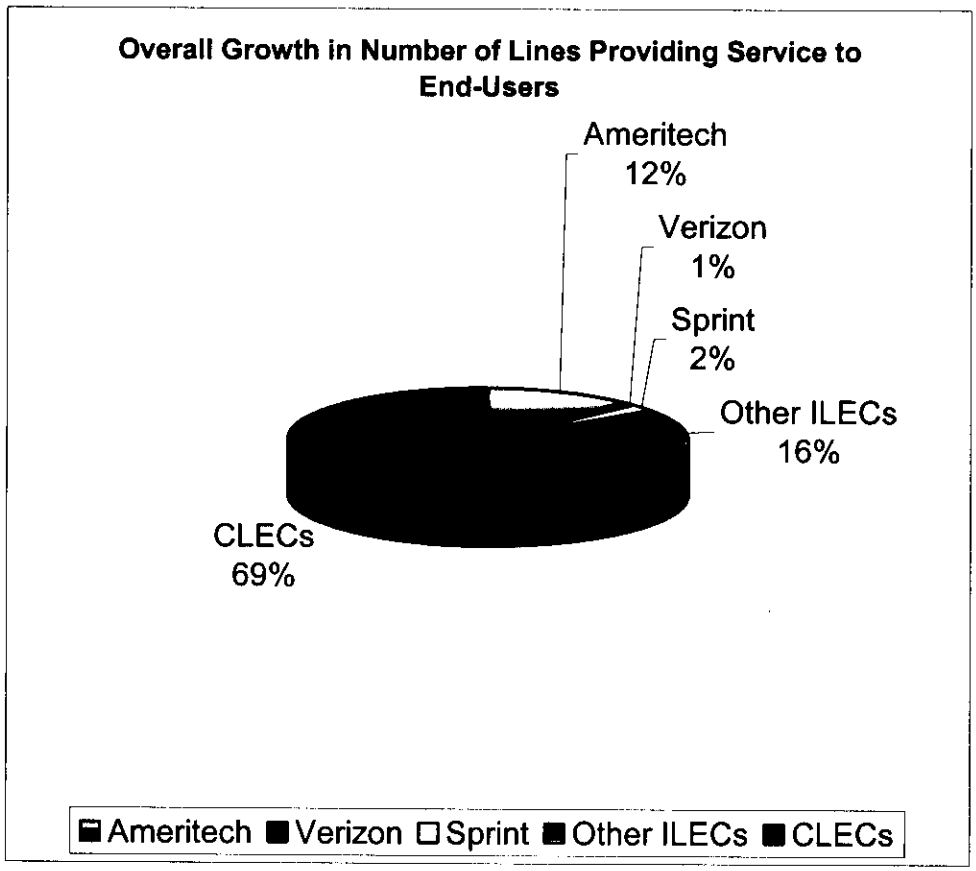

Chart 3

Market Performance Data and Analysis - Continued

The growth that was experienced by the CLECs was heavily weighted toward business customers. Of the 270,472 access lines added from 1999 to 2000, 228,462 were non-residential lines. The 264,417 non-residential access lines served by CLECs represents 18.26% of the lines serving the non-residential local market. The number of residential lines served by CLECs increased from 14,073 in 1999 to 56,083 in 2000. Those 56,083 residential access lines served by CLECs represent 2.2% of the residential market. (See Chart 4)

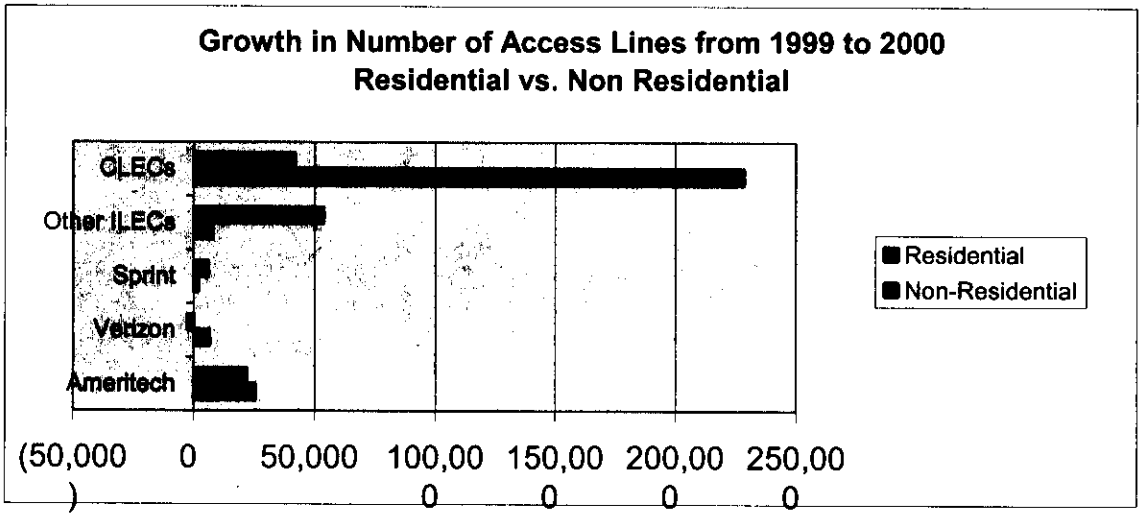

Chart 4

It is also important to look at the number of CLECs that are actually installing their own facilities and competing with the ILECs as opposed to those that are merely purchasing the ILEC's bundled services at a discount and reselling them to end users. The cost of building "owned" facilities is capital intensive compared to leasing and reselling embedded ILEC facilities which may have been constructed in a monopoly era. This financial hurdle is a key factor in the slow growth of the competitive local markets, making it imperative to have UNEs and resold facilities readily available to spur continued competition. The following table shows that the majority of CLEC access lines are "owned" when compared to service provide over leased UNEs and resold lines. Most of the 192,233 lines provided by facilities-based CLECs are those of just 3 competitive carriers. A very small percentage of "owned facilities" belong to the other 43 CLECs who offer service by leasing UNEs or reselling the ILEC's service. (See Chart 5)

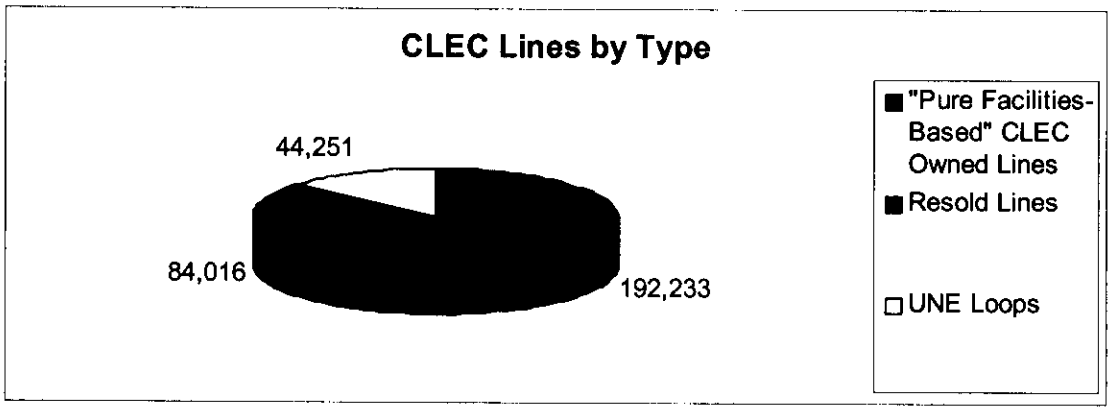

Chart 5

Market Performance Data and Analysis - Continued

Another factor to consider is where CLECs are locating within the state. Competition growth is occurring faster in more densely populated areas for a number of reasons: more potential customers, CLECs can locate their own facilities easier in these areas, and it is more economical for them to compete for urban customers. Chart 6 shows where Indiana ranks by population among the states in this region. Chart 7, below, illustrates that fewer Indiana customers are living in urban areas as compared to the other states in the region. [5]

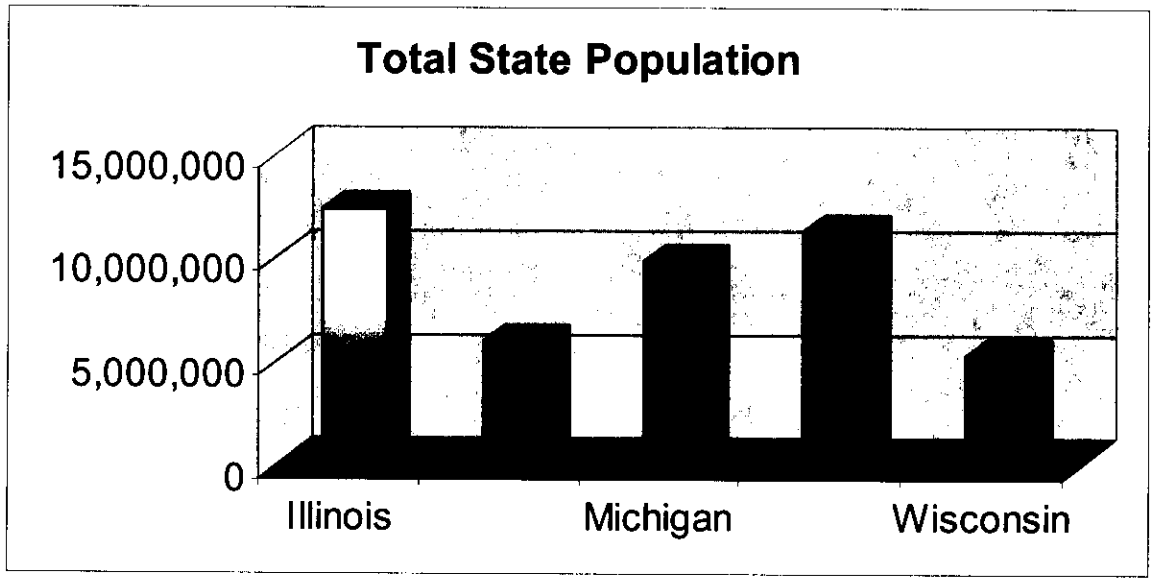

Chart 6

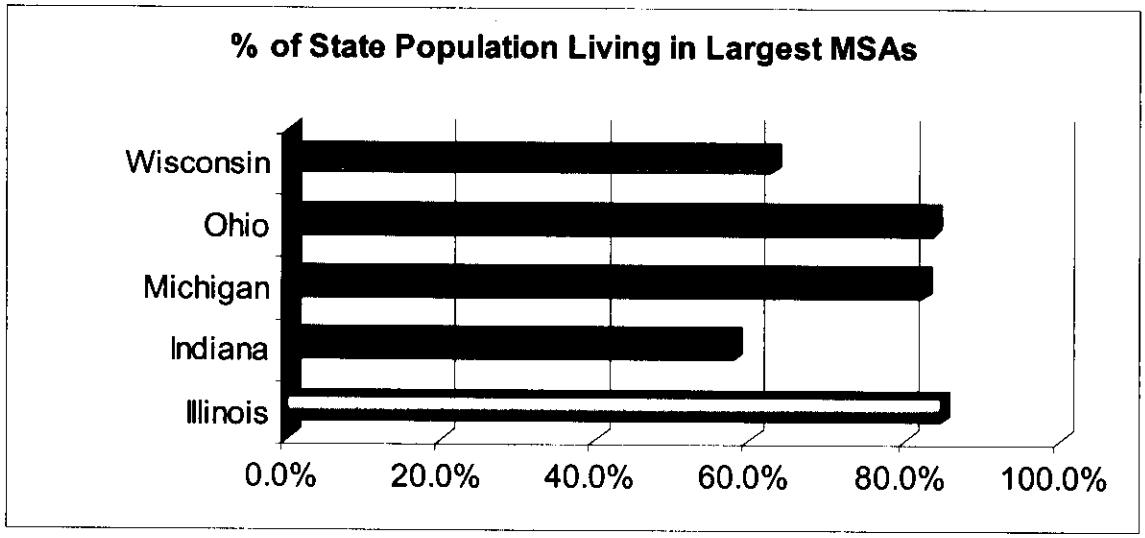

Chart 7

[5] U.S. Census Bureau

The following map shows the number of CLEC that provide service on their "owned" facilities, by county, in the State of Indiana. As evidenced by this map, competitive growth in the more metropolitan areas of the central part of the state, as well as Allen and Lake counties has progressed at a much faster rate than in the rural areas.

Facilities Based CLECs Currently
Providing Service In Indiana

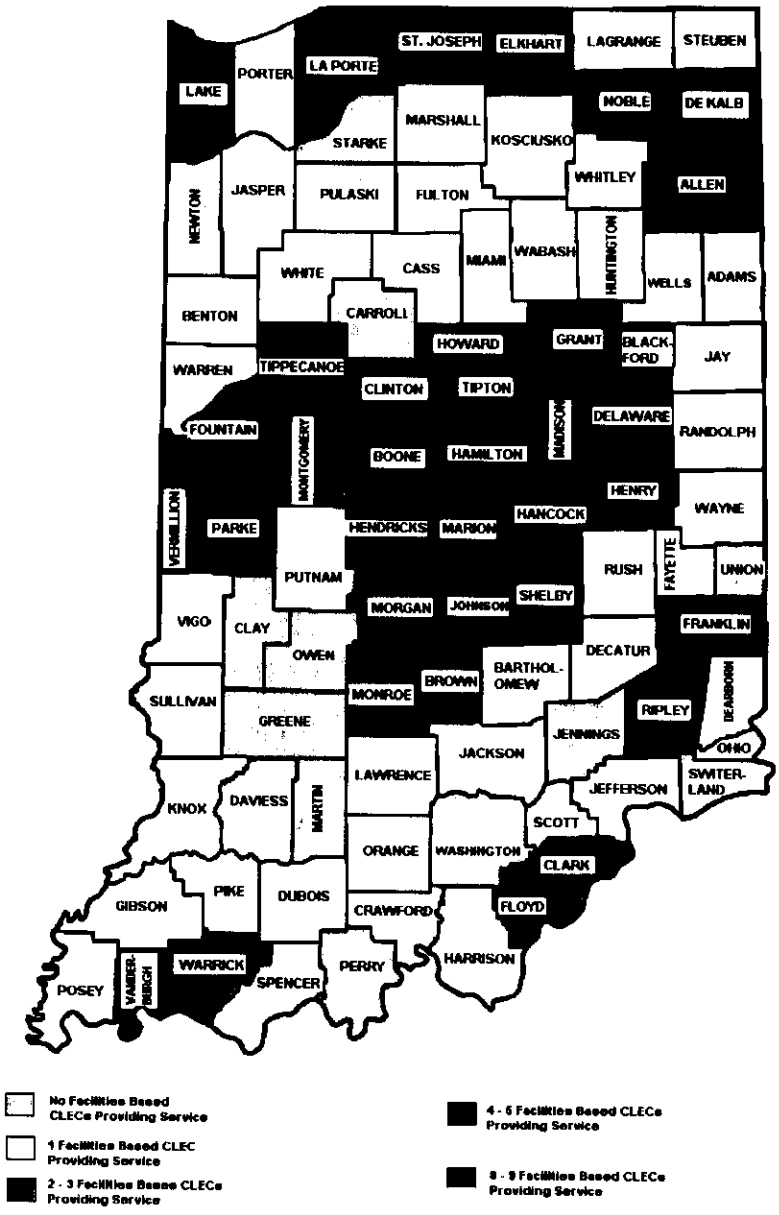

Chart 8

Market Performance Data and Analysis - Continued

It is evident that CLECs in Indiana are experiencing increases in access lines served and revenues earned. In 1999 CLECs had approximately 1.4% of the access lines in the state and by the end of 2000 this had increased to 8%. Even though this is meaningful growth in one year, the ILECs, in the aggregate, still have market dominance with 92% of the access lines in Indiana. It is also important to note that some of the CLECs, which are providing service to residential customers, are prepaid local carriers, or carriers that target customers who cannot get phone service from the ILEC due to credit difficulties. While these customers pay a much higher rate for local service than ILEC customers those specialized CLECs fill a market niche. The information represented in the preceding graphs includes the approximately 9,000 access lines provided by these types of carriers.

In summary, market performance data indicate that competition is gaining a small foothold. The growth is concentrated in the non-residential market and the majority of the facilities-based growth is over three (3) CLECs facilities. Local competition is more likely to thrive in cities as business and residential population density provide one economic component necessary for investment in "owned facilities." Resale of local service and leasing UNEs from the incumbent carriers are two alternate methods of providing CLEC services, however the greatest growth year-over-year was in "owned facilities." Investment in new technologies is not without financial risk. The Commission is monitoring CLEC bankruptcies as an indicator of competitive growth and choice. The mid-year FCC Survey will be analyzed thoroughly in the interim prior to the next annual survey by the IURC.

4.0 Important Considerations

Other Commission Duties

In fulfilling our statutory duties the IURC is an advocate of neither the public nor the utilities and is required by state statute to make decisions that balance the interests of all parties to ensure the utilities provide adequate and reliable service at reasonable rates.

Streamlining and Rule Making: In 2001 the Commission is working to further streamline the certification process and the process for approving financing for certain types of telecommunications companies. However, in certain instances the IURC has worked with the Attorney General's office to create new rules under the Indiana Administrative Code (IAC). This year we are in the process of developing rules for service quality and customer rights.

Rural Carriers: Recently, the FCC issued an order mandating that state utility commissions certify that rural carriers who obtain Federal universal service funds use the funds "for the provision, maintenance, and upgrading of facilities and services for which the support is intended"[6] or the funds will not be available. The IURC is in the process of certifying that rural telephone companies receiving Federal Universal Service support are using the funds as required. The current intrastate Indiana High Cost Fund (IHCF) is administered by Ameritech Indiana and provides assistance to qualified small Local Exchange Carriers.

Filings With and Comments to the FCC: The IURC may also have an impact on telecommunications by formally commenting on Federal or State legislation or FCC proposed regulations, which, in many cases, ultimately determine the rules and regulations for many telecommunication services. Last year the IURC formally commented on two proposed FCC rules. In February, 2001 the IURC commented on an FCC proposed rule, called the MAG plan, that would decrease access charges for rural carriers and increase the subscriber line charge. The IURC suggested that any attempts to modify or reform access charges and universal service should be done through negotiation and only after extensive research into the overall impact of such reform. The IURC provided formal comments on an FCC proposal to eliminate some of the reporting requirements for service quality data. In our comments we focused on the need to maintain the extensive service quality reporting to allow comparison of data filed at the state and federal levels. Such comparisons permit the IURC to view state-by-state service quality and to monitor the effects of technological changes in this rapidly changing industry. Finally we submitted comments and petitions to the FCC on issues related to numbering. Specifically, we have requested and received delegated authority to implement number conservation measures and filed comments on numbering matters that other state commissions have before the FCC.

Comments Regarding Proposed Legislation: TA-96 was the most important piece of federal telecommunications regulation in many years, but every year legislation is proposed that affects telecommunications companies. The IURC closely monitors such legislation, and in May 2001 sent a letter to the Indiana Congressional delegation opposing legislation that would grant Regional Bell Operating Companies the opportunity to carry InterLATA, interexchange data traffic. When necessary, the IURC will propose that the Indiana General Assembly enact specific legislation. Last year the IURC specifically requested approval of legislation to grant the IURC authority over mergers between holding companies and the authority to levy fines.

[6] See Section 254(e) of TA-96.

Broadband Perspectives

Access to Advanced Services: The advanced services market can be divided into retail and wholesale sub-markets. Some companies may operate in only one of those sub-markets; others may operate in both. There are several current and emerging methods to access advanced services; this section is limited to a narrow segment of the regulated services.

The Commission asked the parties responding to the Local Competition Survey to break down these technologies by type of customer (residential vs. business); percent provided over the carrier's own facilities; percent directly to end users; and bandwidth (greater than 200 kb/sec. in both directions and greater than 2 Mb/sec. in both directions). An insufficient number of carriers provided a public response to this breakdown to compile aggregate, statewide statistics. Consequently no significant data are available to describe the entire Indiana market, demand, trends or actual share by regulated or non-regulated entities.

For the regulated services today, and absent the requested statewide breakdown, it is clear that CLECs are still very dependent upon the ILECs for several items in the DSL facilities "chain": DSL-capable loops to reach the end-user customers and DSL-capable wire centers in which to terminate both loops and transport. Statewide, as of December 31, 2000, there were 566 ILEC wire centers. Of these, only 25 (4.4%) were xDSL capable. The three largest ILECs – SBC/Ameritech Indiana, Verizon/GTE North, and Sprint/United – accounted for more than 75% of the 566 total wire centers but fewer than half of the 25 xDSL-capable wire centers.[7] The implications of this for Indiana are not totally certain. However, because the ILECs still have the largest share of all loops in the state by definition, they have the lion's share of DSL-capable loops, as well.

While it is certainly possible to obtain high-speed access to the Internet using technologies other than DSL loops such as cable modems, the lack of xDSL-capable wire centers and the lack of xDSL-capable loops limits the ability of some CLECs to compete effectively in this emerging space. This arena is one with a variety of new entrants such as CATV/Internet providers that will compete against the ILECs, the ILEC data affiliates[8], and pure facilities-based CLECs, if any, that have their own DSL-capable loops. To compete CLECs may be forced to build their own facilities, which may not always be a viable short-term business strategy.

CLECs wishing to obtain DSL-capable facilities from ILECs and/or to provide some form of DSL transport to ISPs may face other problems, as well. The recent string of bankruptcies, forced layoffs, plummeting stock prices in the telecommunications and DSL sectors has been well publicized. Only one DSL wholesale provider, Rhythms, responded to the Commission's 2000 Local Competition Survey. They have now ceased operations as well.

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[7] SBC reported 167 total wire centers to the FCC for Ameritech Indiana, as of December 31, 2000. (Ameritech Indiana reported a different, smaller number of total wire centers to the IURC). Out of these 167 total Ameritech Indiana wire centers, 11 were xDSL capable (all in the Indianapolis exchange), as of December 31, 2000. SBC recently filed data with the FCC showing a slight increase in the number of xDSL-capable wire centers, to 17. All six of the additional wire centers appear to be outside of the Indianapolis exchange, but still within the Indianapolis local calling area.

[8] The three largest LECs Ameritech, GTE, and United all have data affiliates – SBC Advanced Services, Inc. ("ASI" or "AADS," Ameritech Advanced Data Services); Verizon Advanced Data, Inc. ("VADI"); and Sprint Communications Company L.P., respectively. In the case of ASI and VADI, the parent corporations, SBC and Verizon, are prohibited under their respective FCC merger orders and conditions from providing most broadband and advanced services through the operating companies directly and must provide the affected services through a separate data affiliate. The U.S. Court of Appeals for the DC Circuit recently vacated that portion of the SBC/Ameritech merger order. (ASCENT v. FCC, No. 99-1441). It is unclear whether SBC or Verizon will elect to maintain the separate advanced services affiliate organizations (ASI and VADI) structure or will seek to shift the advanced services facilities and functions to the operating companies (Ameritech Indiana and Verizon/GTE North).

Economic Perspectives

To achieve the breakthroughs promised by technology, and to promote economic growth, competition in all segments of the market is necessary. The Telecommunications Act of 1996 empowered state governments "with performing specific regulatory duties under the Telecommunications Act of 1996 that are meant to initiate pro-competitive policies at the local exchange level."[9] Competition must be recognized as a key element of successful economic development policy. "To reach its goal, Indiana must break away from over-reliance on traditional industries." Indiana is ranked 17th best in the nation for low business costs and 14th best for cost of living. It is imperative to attract companies that are the engines of quality economic growth, companies that have greater than 15% earnings growth, innovative cutting edge products and services. "Regional high technology strategies can encourage business development."[10]

What elements should be considered? "Many firms in information-intensive sectors make locational decisions based, in part, on the quality of a state's telecommunications infrastructure. According to Russ Kesler of GTE (Verizon). "Eighty-two percent of relocation businesses list telecommunications capacity as a key factor in selecting a new site."[11]

Economic development is more than building infrastructure and more than just attracting businesses to locate in any state. Diversification protects against mature industry cycles, but also new-economy risks as well. Regions of the country that attracted a concentration of start-ups felt the impact of the DotCom bust in 2000. Likewise, the financial upheaval of the Telecommunication Industry in 2000-2001 impacted cities when the industry icons like Nortel, Lucent, and CISCO suffered reversals in fortune. Layoffs and significantly reduced spending are factors in the health of the national economy.

The companies that plan to bring innovation, choice, and the concomitant promised economic benefits have been hard hit. Start up companies bringing innovation and access to the high-speed Internet Access market found the going rough as mentioned previously in the Broadband Perspective section of this report.

> Hope for real competition is rapidly running out. Two months ago, one of the largest CLECs, Covad Communications cut back the planned expansion of its national DSL broadband network. Two weeks ago, another large CLEC, NorthPoint Communications, which is in bankruptcy, ended service to 100,000 customers, Last week, Rhythm NetConnections ran out of money. And soon, PSInet, which laid a million miles of fiber optic through 28 countries and 90 metropolitan areas of the United States, could follow suit. As PSInet founder William Schrader says, the "dinosaurs" (as he calls the Bell monopolies) are winning because "deregulation has stopped, and they will become monopolists again because the competition can't compete with monopolists."[12]

Likewise, the ILECs lost over $ 50 B in market value in a 9-month period in 2000, according to Thomas W. Hazlett, resident scholar at AEI.[13]Economic growth arises when competitive markets thrive. The very existence of competitive markets is imperative to sustained growth. Benefits of new technology and lower prices accrue can accrue to all. Using the example of the breakup of the Bell System, Vice President Al Gore offered his perspectives in a speech in 1994:

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[9] *Telephone Report to the Regulatory Flexibility Committee of the Indiana General Assembly,* by the Indiana Utility Regulatory Commission, September 2000, p.1.

[10] *BreakAway Growth,* p.3

[11] As quoted by Whitney Chamberlin, *Telecommunications and Community Economic Development* (Center for Policy Alternatives, Washington, D.C., 1995

[12] Comments on NRO April 13, 2001: By James K. Glassman, Host, Tech Central Station. Columnist Washington Post, comments on Technology.

[13] Remarks of Thomas W. Hazlett, resident scholar, July 11, 2001, in an American Enterprise Institute, as reported in TR Daily, Telecommunications Reports International.

Economic Perspectives - Continued

> To understand why competition is so important, let's recall what has happened since the breakup of AT&T ten years ago this month. As recently as 1987, AT&T was still predicting that it would take until the year 2010 to convert 95 percent of its long distance network to digital technology. Then it became pressed by competition. The result? AT&T made its network virtually 100 percent digital by the end of 1991. Meanwhile, over the last decade, the price of interstate long distance service for the average residential customer declined by over 50 percent.[14]

Liberalizing the local telephone market is a major goal of the Telecommunications Act of 1996. While many sides will press for rules to support unique sector advantages, competition will emerge for the local market, bringing economic advantages along the way. Federal universal-service support, reciprocal compensation, and broadband tax credits are examples of issues still being debated to gain the egalitarian visions of universal service. However, on the practical level, the public wonders about a more fundamental question of economics: "Why does it cost me more to call half-way across the state than it costs to call across the country?"[15]

The Aspen Institute's Communications and Society Program, noted in 1998:

> Probably the area of greatest significance in the report where a partial consensus emerges, is pricing. The group struggled at length over what many saw as a disincentive for incumbent local exchange carriers to invest in new technology if they must share that technology with competitors at wholesale prices. While participants generally agreed with the concept of a sunset to current wholesale pricing and unbundling requirements, they failed to reach consensus on a specific test for when that sunset should occur.[16]

Among its conclusions is a common theme that "active leadership from government officials could provide some breakthroughs."[17] Many ILECs were adamant that they will not aggressively invest in new facilities unless wholesale pricing and the mandate to share technology changes. Competitors fear that without unbundling of local loops and Total Element Long Run Incremental Cost (TELRIC), the ILECs will prevent growth in the local competitive marketplace. That scenario inhibits deployment of advanced services, not only in metropolitan areas, but in rural areas as well. Further, communities throughout Indiana may be harmed by not seeing rapid and equal access to low cost, high speed Internet service.

To gain the prospect and promise of economic benefit arising from competition in the long distance market place where competitor's thrived and prices fell, it is necessary to overcome the disputes and maneuvers and delays which characterize the opening of local markets to effective and substantial competition. Balance must be achieved by incenting infrastructure investment by incumbent Local Exchange Carriers through alternate forms of regulation such as *Opportunity Indiana 2000*. Balance will be achieved by carrying out the mandates of the Telecommunications Act of 1996 by opening local markets to competition, insuring the existence of Interconnection rules and agreements, removal of barriers to entry, and the development of universal service.

At the national level, through year-end 2000, Incumbent Local Exchange Carriers (ILECs) control 91 ½ % of the local telephone lines. Indiana, in the same time period is nearly the same as the national average with 92% ILEC share. It is notable that the CLEC share in Indiana grew from under 3% share to 8% in one year's time.

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[14] Vice President Al Gore, speech to the Academy of Television Arts and Sciences, Los Angeles, January 11, 1994.

[15] Congressman Mike Mills, *Washington Post article,* quoted in Telwars.

[16] Competition, Innovation, and Investment in Telecommunications, Charles M. Firestone, Director, April 1998.

[17] *ibid.* P.20.

5.0 Acknowledgements

The Commission wishes to acknowledge the efforts of the following staff members for their contributions to this report:

Current Staff	*Farewell to Valued Staff – 2000*
Mark Bragdon *Principal Telecommunications Analyst*	*Maureen Flood* *Principal Telecommunications Analyst*
Joel Fishkin *Assistant Director of Telecommunications*	*Stan Sallier* *Assistant Telecommunications Director*
Jennifer Gilmore *Principal Telecommunications Analyst*	*Sandra Ibaugh* *Director of Telecommunications*
Sally Getz *Principal Telecommunications Analyst*	
Karl Henry *Principal Telecommunications Analyst*	
Brian Mahern *Principal Telecommunications Analyst*	
Kevin Sosbe *Principal Telecommunications Analyst*	
Pam Taber *Assistant Director Telecommunications*	
Mary Beth Fisher *Director of Public Information*	
Barb Muncy *Tariff Administrator*	
Rich Higgins *Director of Telecommunications*	
Mike Leppert *Executive Director*	

ATTACHMENT 1

TELECOMMUNICATIONS COMPANIES IN BANKRUPTCY

Following is a list of some of the telecommunications and broadband companies that have recently filed bankruptcy petitions. Miller & Van Eaton has obtained this information through its review of various news sources on the Web.

COMPANY	DATE FILED	BANKRUPTCY COURT
Rhythms NetConnections, Inc.	08/02/01	So. District of New York
Metricom	07/02/01	No. District of California (San Jose)
360Networks USA	06/29/01	So. District of New York
PSINet	06/01/01	So. District of New York
Teligent, Inc.	05/21/01	So. District of New York
Viatel, Inc.	05/02/01	Delaware
AtLink Networks	04/25/01	Delaware
Convergent Communications	04/19/01	District of Colorado
WinStar Communications	04/18/01	Delaware
Actel Integrated Communications, Inc.	04/11/01	Eastern District of Louisiana
REAnet	04/02/01	District of Colorado (Denver)
Pathnet Telecommunications	04/02/01	Delaware
ConnectSouth Communications	Ceased Operations	03/24/01
Tess Communications	03/23/01	District of Colorado (Denver)
e.spire Communications	03/22/01	Delaware
Vectris, Inc.	01/18/01	Western District of Texas (Austin)
NorthPoint Communications	01/16/01	Northern District of California (San Francisco)
Digital Broadband	12/29/00	Delaware
Picus Communications	12/19/00	
Quentra Networks, Inc.	12/15/00	Central District of California

Flashcom, Inc.	12/08/00	Central District of California (Santa Ana)
Fastpoint Communications	12/05/00	Central District of California (Los Angeles)
Zyan Communications, Inc.	12/04/00	Central District of California (Los Angeles)
ICG Communications, Inc.	11/14/00	Delaware
NETtel Communications, Inc.	10/16/00	District of Columbia
American Metrocomm Corporation	8/18/00	Delaware
GST Telecommunications, Inc.	5/17/00	Delaware
Jato Communications	Ceased Operations 12/29/00	
OpTel, Inc.	10/29/99	Delaware